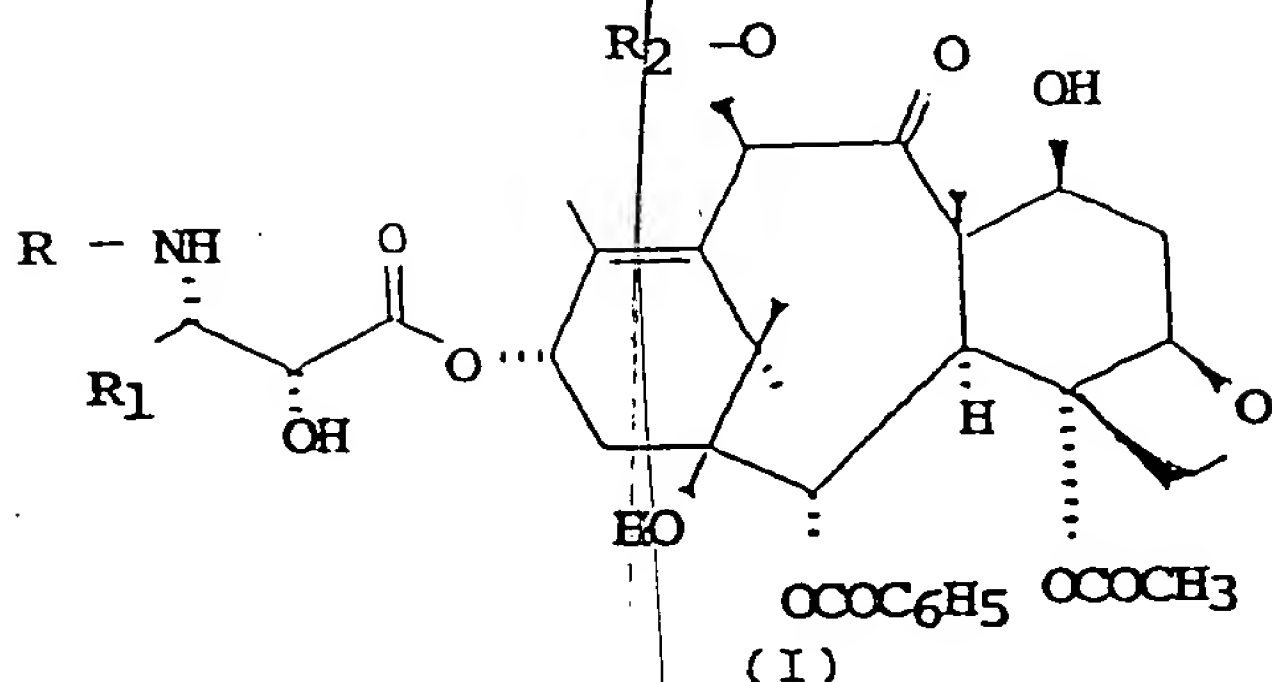


CLAIMS

1. A process for the preparation of the compounds of formula I

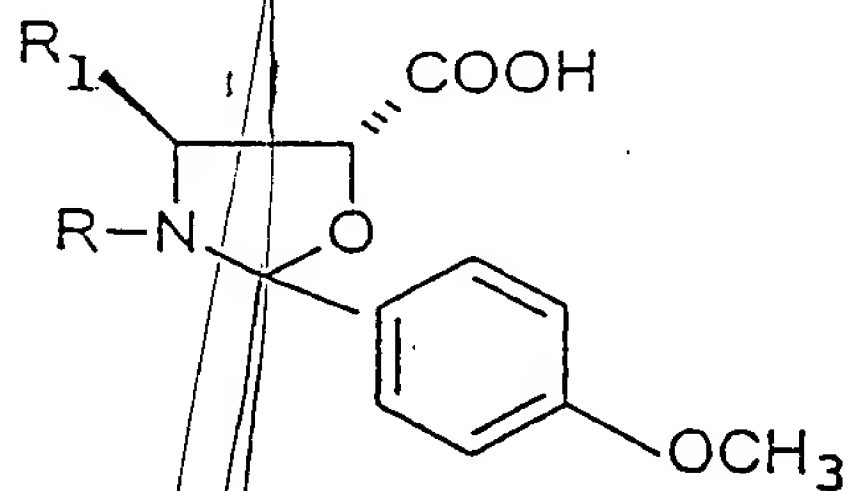


wherein R is tert.butoxycarbonyl, benzoyl or the residue of a straight or branched aliphatic acid, R<sub>1</sub> is phenyl or a straight or branched alkyl or alkenyl and R<sub>2</sub> is hydrogen or acetyl,

which comprises:

a) simultaneous protection of the hydroxyl groups at the 7- and 10- positions of 10-deacetylbaccatin III with trichloroacetic derivatives;

b) subsequent esterification of the hydroxyl group at the 13- position by reaction with a compound of formula (VII):



wherein R is tert.butoxycarbonyl, benzoyl or the residue of a straight or branched aliphatic acid and R<sub>1</sub> is phenyl

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or a straight or branched alkyl or alkenyl;

c) removal of the trichloroacetyl protective groups;

d) optional selective acetylation of the hydroxyl group at the 10- position;

5 e) acid hydrolysis of the oxazolidine ring.

2. A process as claimed in claim 1, in which step b) is effected in the presence of a condensing agent and of a base.

10 3. A process as claimed in claim 2 in which the condensing agent is dicyclohexylcarbodiimide and the base is pyridine.

15 4. A process according to any one of the above claims, in which the trichloroacetoxy groups at the 7- and 10-positions are removed by treatment with  $\text{NH}_4\text{OH}/\text{NH}_4\text{Cl}$  in aliphatic solvents.

5. A process according to any one of the above claims, in which the selective acetylation of step d) is carried out by reaction with acetic anhydride in the presence of cerium III, scandium or ytterbium salts.

20 6. A process according to any one of the above claims, in which step e) is effected with organic or inorganic acids in aliphatic alcohols or tetrahydrofuran.

7. A process as claimed in claim 6, in which the hydrolysis is carried out with formic acid.

25 8. A process according to any one of the above claims, for the preparation of Paclitaxel ( $\text{R} = \text{benzoyl}$ ,  $\text{R}_1 = \text{phenyl}$ ,  $\text{R}_2 = \text{acetyl}$ ) or Docetaxel ( $\text{R} = \text{tert.butoxycarbonyl}$ ,  $\text{R}_1 = \text{phenyl}$ ,  $\text{R}_2 = \text{H}$ ).

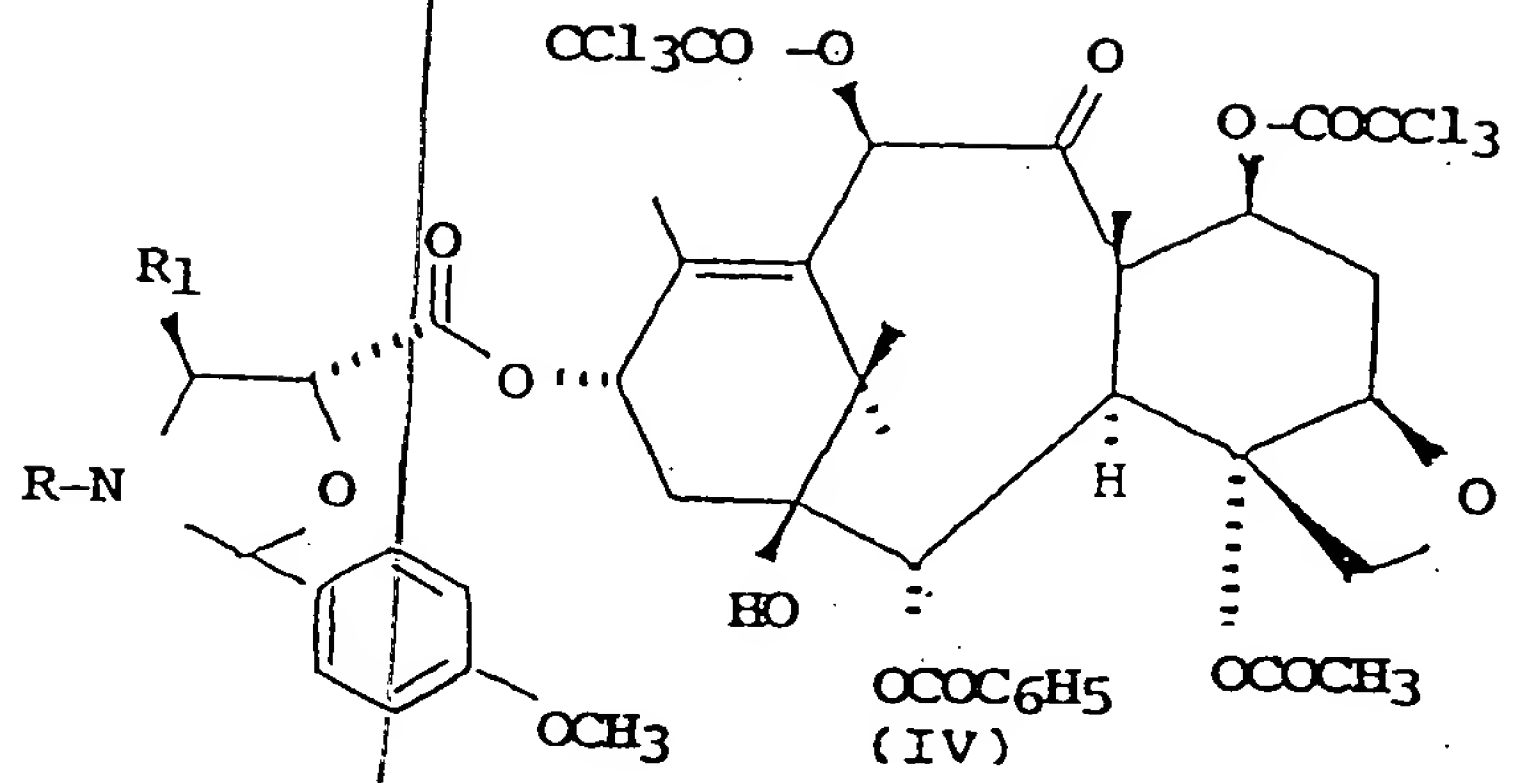
9. Intermediates of formula IV

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wherein R and  $R_1$  are as defined in claim 1.

add A1  
add A7